

**SINGLE-CYCLE HARDWARE IMPLEMENTATION  
OF CRYPTO-FUNCTION FOR HIGH  
THROUGHPUT CRYPTO-PROCESSING**

**ABSTRACT OF THE DISCLOSURE**

- 5           A hardware implementation of a crypto-function is realized using  
combinational logic performing computation iterations of the crypto-function  
on data in a single hardware cycle. Only combinational logic is used to  
implement the entire cryptographic algorithm, and registers are used only to  
store input or output from the combinational logic, leading to a very high  
10   speed implementation of the crypto-function.